

REMARKS

Reconsideration and allowance in view of the following remarks are respectfully requested.

No claims have been amended by this response. Claims 16-57 stand withdrawn without prejudice; Claims 1-15 are currently pending.

The Examiner has rejected Claims 1-15 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,069,960 to Fukumoto et al. ("the Fukumoto Patent"). The Examiners' rejection is respectfully traversed, on the grounds that the pending claims recite a heavier and therefore larger tile than that of the Fukumoto Patent, the tile of the present invention therefore having unique and unexpected shock absorption capabilities.

The Fukumoto Patent discloses a thermally insulating foam glass tile that is coated with an outside surface to make a hard skin suitable for covering the outside of a building. The tiles disclosed are fabricated in extremely small sizes *e.g.* (18 cm x 18 cm x 6 cm) (see Col. 7, lines 34-40), and the interior foam material which makes up the bulk of the tile is typically of low density resulting in relatively lightweight tile.

The Examiner has stated that the Fukumoto Patent discloses a glass tile having a weight in the range of "12.5 lb to 187 lb (3-75mg)". This statement by the Examiner is consistent with the Examiner's reading of the Fukumoto Patent as set forth in the Office Action of July 1, 2003. First, applicant respectfully submits that the range of 3-75mg (milligrams) is 6.6×10^{-6} lb. to 165×10^{-6} lb. (0.0000066 lb. or 6.6 millionths of a pound to 0.0000165 lb. or 16.5 millionths of a pound). It is not 12.5 to 187 lbs. as the Examiner's rejection appears to state. Furthermore, as set forth in applicants' response of September 11, 2003, applicant respectfully submitted that there is no disclosure anywhere in the Fukumoto Patent of tile within the weight range of 12.5 to 187 lbs. Indeed, Col. 6, lines 43-46 of the Fukumoto Patent disclosed a glass tile with a density between 0.2 and 1.3 gm/cc (12.49-81.16 lb/cu. ft.). Therefore, according to applicant's calculations, tiles of the size disclosed in the Fukumoto Patent would have a weight between 0.86 lbs. and 5.57 lbs.

As the Examiner's reading of the Fukumoto Patent differs irreconcilably from that of applicants on this point, applicants respectfully request that the Examiner specifically point out the disclosure in the Fukumoto Patent from which the Examiner arrives at a weight range of between 12.5 and 187 lbs.

Claim 1 of the present invention recites a glass tile having a density between 30 and 100 lb./cu. ft. and a weight of > 30 lbs. The tiles disclosed in the Fukumoto Patent (18 cm x 18 cm x 6 cm) has a volume of 1,944 cm³. It is known that 1 cm³ = 3.5315 x 10⁻⁵ ft³ (35.315 millionths of a cubic foot). Therefore, the tile disclosed in the Fukumoto Patent has a volume of 0.069 ft³. Assuming the tile has the maximum density disclosed in the Fukumoto Patent (81.16 lb./cu.ft.) the tile of the Fukumoto Patent would have a weight no greater than 5.6 lbs., far less than the weight required by the pending claims. In fact, any tile having even the maximum claimed density of 100 lbs. per ft³. and the minimum weight of 30 lbs. would still be significantly larger in size than the tiles disclosed by the Fukumoto Patent.

The difference in tile sizes is significant, because the larger the surface area and thickness of the individual tile, the more resistant the tile can be to explosion and earthquake damage. This unexpected result is due to a number of factors, including the fact that for any given surface to which tiles are applied, the surface area devoted to seams between the tiles is inversely proportional to individual tile sizes. Therefore, the larger size of the tiles recited in the pending claims relative to those of the prior art lend them a distinct unexpected advantage in the event of an earthquake or terrorist attack. Similarly, a tile thickness is directly proportional to its ability to absorb a blast shockwave, again lending an unexpected advantage to the tiles of the present invention. This difference is sufficient to render the tiles of Fukumoto comparatively ineffective against blast and quake damage.

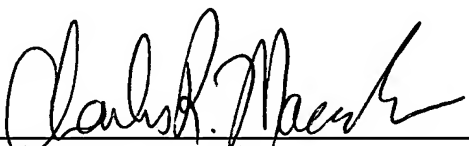
In summary, the Examiner's reasoning for the rejection of Claims 1-15 rests upon the premise that the density and weight of the tile of the present invention is "approximately similar" to that of the prior art. However, applicant believes, particularly with respect to the weight of the tiles, that the tiles of the present invention are entirely different from those of the prior art and have unexpected advantages as a result.

In view of the foregoing, it is believed that Claims 1-15 are patentable over the cited references. Accordingly, allowance thereof is respectfully requested. If an extension of time is required to enable this document to be timely filed and there is no separate request for extension of time, this document is to be construed as also constituting a request for an extension of time under 37 CFR § 1.136(a) for a period of time sufficient to enable this document to be timely filed. Any fee required for such a request for extension of time and any other fee required by this document pursuant to 37 CFR §§ 1.16 and 1.17 and not submitted herewith should be charged to the deposit account of the undersigned attorney, Account No. 01-1785; any refund should be credited to the same account.

Respectfully submitted,

AMSTER, ROTHSTEIN & EBENSTEIN LLP
Attorneys for Applicant
90 Park Avenue
New York, New York 10016
(212) 336-8000

Dated: April 9, 2004
New York, New York

By: 
Charles R. Macedo
Registration No. 32,781